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| APPLICATION NO.                          | FILING DATE | FIRST NAMED INVENTOR        | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--|-------------|-----------------------------|---------------------|------------------|--|
| 09/623,945                               | 09/12/2000  | Franciscus L.A.J. Kamperman | PHN 17,285          | 2098             |  |
| 7590 02/09/2005                          |             |                             | EXAM                | INER             |  |
| Philips Electronics North American Corp. |             |                             | KIM, JUNG W         |                  |  |
| 580 White Plains Rd. Tarrytown, NY 10591 |             |                             | ART UNIT            | PAPER NUMBER     |  |
| Tarrytown, NY                            | 10291       |                             |                     |                  |  |
| Tarrytown, NY                            | 10391       |                             | 2132                |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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Technology Center 2100

|  | Application No.   | Applicant(s)   |  |
|--|---|--|--|
|  | 09/623,945  | KAMPERMAN ET AL.   |  |
| Office Action Summary  | Examiner  | Art Unit   |  |
|  | Jung W Kim  | 2132   |  |
| The MAILING DATE of this communication apperiod for Reply  | opears on the cover sheet with the c  | correspondence address   |  |
| A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tingle within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |
| Status "   |   |  |  |
| 1) Responsive to communication(s) filed on 22  | October 2004.   |  |  |
| ,  | nis action is non-final.  |  |  |
| 3) Since this application is in condition for allow closed in accordance with the practice under   | rance except for formal matters, pro  |  |  |
| Disposition of Claims  |   |  |  |
| 4) ⊠ Claim(s) <u>1-29</u> is/are pending in the application 4a) Of the above claim(s) is/are withdrest 5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-29</u> is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and  | rawn from consideration.  |  |  |
| Application Papers   |   |  |  |
| 9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the   | ccepted or b) objected to by the ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is of   | ee 37 CFR 1.85(a).<br>ojected to. See 37 CFR 1.121(d).   |  |
| Priority under 35 U.S.C. § 119   |   |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a light   | ents have been received. ents have been received in Applicationity documents have been receiveau (PCT Rule 17.2(a)).  | tion No red in this National Stage   |  |
| Attachment(s)  |   |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date   | 4) Interview Summar Paper No(s)/Mail [ 5) Notice of Informal 6) Other:  |  |  |

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#### **DETAILED ACTION**

1. Claims 1-4 and 10-29 have been examined. Applicant in the amendment filed on October 22, 2005 amended claims 1, 3 and 13 and added new claims 25-29. Claims 5-9 were canceled in a previous amendment.

### Response to Amendment

- 2. The objection to the specification is withdrawn as the amendments to the disclosure overcome the objections.
- 3. The objection to claim 20 is withdrawn as the amendment to claim 20 overcomes the objection.
- 4. The 112, second paragraph rejection to claims 3 and 13 are withdrawn as the amendments to the claims overcome the 112, second paragraph rejections.

# Response to Arguments

- 5. The following is a response to applicant's arguments on pgs. 6-10 in the amendment filed on October 22, 2005.
- 6. Regarding applicant's argument that "[c]laims 10-13 are directed to a computer-readable medium having a program stored within", and hence the 101 rejection is not proper (see Remarks, pg. 7, 1<sup>st</sup> paragraph), examiner disagrees. Claims 10 and 11 are drawn to signals per se. The preamble of claims 10 and 12, "A signal comprising ...",

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distinctly identifies the invention as being drawn to signals, and hence, is non-statutory as not being tangibly embodied in a manner so as to be executable and is non-statutory for failing to be in one of the categories of invention. Claims 10-13 are drawn to encoded data which is nonfunctional descriptive material, not a process, machine, manufacture, nor composition of matter. The preamble of claims 10 and 12, "A signal comprising encoded data ..." and the preamble of claim 11, "A data carrier comprising a recorded signal ..." and the preamble of claim 13, "A data carrier comprising the encoded signal ..." distinctly identifies the invention as being drawn to nonfunctional descriptive material, and hence, is non-statutory for failing to be in one of the categories of invention.

7. Regarding applicant's argument Linnartz does not cover the limitations of claim
3, specifically that "[t]here is no disclosure or suggestion within Linnartz for reducing the data rate" and "there is no teaching or suggestion within Linnartz for using encoded data to derive the parameter set and the data-rate-reduced signal" (see Remarks, pg. 7, 4<sup>th</sup> paragraph), examiner disagrees. MPEG compression, specifically Inter-frame encoding of data frames to P and B frames, are standard means of reducing the encoded bit rate; Linnartz teaches compression techniques using Intra-frame (I frames) and Inter-frame coding (P and B frames). See Linnartz, pg. 2, lines 9-12. Further, Linnartz teaches compressed audio or video signals comprise a plurality of coding parameters (these values indicate how an encoded stream is encoded for proper decoding). See Linnartz, pg. 1, lines 27-28. Linnartz discloses setting a predetermined value of one of these parameters (number of slices) to insert a watermark, wherein the assignment of the

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predetermined value of the one of the parameters affects the other parameters. See Linnartz, pg. 1, lines 23-26; pg. 3, lines 18-20.

- 8. Regarding applicant's argument that Linnartz does not cover the limitations of claim 4, specifically that "Linnartz teaches the extraction of the parameter set from the encoded signal rather than extracting information from the parameter set from the encoded signal rather than extracting information from the parameter set as defined by claim 4", examiner notes that decoding of MPEG compressed values necessarily requires extracting information from the parameter set of encoded data. See Linnartz, pg. 3, lines 5-6.
- 9. Finally, applicant's arguments of claims 1, 2 and 5-28 are based on the arguments against the rejections of claims 1 and 4. Hence, the prior art of record cover applicant's claimed invention.

#### Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-13 are rejected under 35 U.S.C. 101 because claims 10 and 12 are drawn to signals per se, not embodied on a computer-readable medium nor on an electromagnetic wave. See MPEP 2106 IV B. 1(a) and (c); *In re Warmerdam*, 31 USPQ2d 1754, 1760 (Fed. Cir. 1994); and *O'Reilly v. Morse*, 56 U.S. 62, 112-114 (1853). In addition, claims 10-13 are drawn to encoded data which is nonfunctional descriptive material, not a process, machine, manufacture, nor composition of matter.

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See MPEP 2106 IV B. 1(b) and *In re Warmerdam*, 31 USPQ2d 1754, 1760 (Fed. Cir. 1994).

## Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 12. Claims 1, 3, 4, 10-14, 16, 17, 19-21, 23 and 24 are rejected under 35
  U.S.C. 102(b) as being anticipated by Linnartz PCT International Application Number
  PCT/IB96/00992 (hereinafter Linnartz).
- 13. As per claim 1, Linnartz discloses a method of encoding data, comprising embedding supplemental data by inserting the supplemental data into the data using at least one parameter which is altered in order to embed the supplemental data; and deriving the supplemental data from other data. See Linnartz, pg. 1, line 22-pg. 2, line 23; pg. 3, 1<sup>st</sup> and 2<sup>nd</sup> paragraphs, especially lines 6-9 and 18-20.

- 14. As per claim 3, Linnartz discloses a method of encoding input data (see Linnartz, page 1, lines 23-25), comprising the steps of:
  - a. partitioning the data into frames (see Linnartz, page 2, lines 10-12; page 3, lines 6-10);
  - b. determining a set of parameters for each frame (see Linnartz, page 1, lines 27-28; page 2, lines 9-12);
  - c. reducing the data rate of the input signal by applying an algorithm which is controlled by the parameter set whereby encoded data includes the set of parameters or at least data which can be used to derive the parameter set and the data rate-reduced signal (see Linnartz, page 1, lines 27-28); and
  - d. embedding supplemental data into encoded data, the parameter set is affected by the supplemental data (see Linnartz, page 3, lines 11-20).

The aforementioned covers claim 3.

- 15. As per claim 4, Linnartz discloses a method as outlined above in the claim 3 rejection under 35 U.S.C. 102(b). In addition, the method includes a method of extracting information which is embedded in the parameter set of an encoded signal as defined in claim 3 (see Linnartz, page 1, lines 23-26; page 3, line 21-page 4, line 2).
- 16. As per claims 10 and 12, Linnartz discloses a method as outlined above in the claim 1 and 3 rejections. In addition, the encoded data is a signal (see Linnartz, page 1, line 6).

- 17. As per claim 11, Linnartz discloses a method as outlined above in the claim 10 rejection. In addition, a data carrier comprises the recorded signal (see Linnartz, page 5, line 17).
- 18. As per claim 13, Linnartz discloses a method as outlined above in the claim 12 rejection. In addition, a data carrier comprises an encoded signal (see Linnartz, pg. 5, line 17).
- 19. As per claims 14, 16 and 17, Linnartz discloses a method as outlined above in the claim 1, 3 and 4 rejections. In addition, the method consists of an arrangement (see Linnartz, Figures 1, 2, and 4).
- 20. As per claims 19-21, 23 and 24, Linnartz discloses a method as outlined above in the claim 1, 3, 4, 14, 16 and 17 rejections. In addition, the arrangement for performing the method is a disc player for audio and audio-visual media (see Linnartz, page 5, lines 4-24).
- 21. Claims 1, 2, 15 and 25-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Isnardi et al. U.S. Patent No. 6,037,984 (hereinafter Isnardi).

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- 22. As per claim 1, Isnardi discloses a method of encoding data, comprising embedding supplemental data by inserting the supplemental data into the data using at least one parameter which is altered in order to embed the supplemental data; and deriving the supplemental data from other data (see Isnardi, col. 2:15-31; 3:45-col. 4:50). The aforementationed cover the limitations of claim 1.
- 23. As per claim 2, Isnardi discloses a method as outlined above in the claim 1 rejection. In addition, Isnardi discloses a method of extracting supplemental data of encoded data. See Isnardi, col. 4:45-46.
- 24. As per claim 15, Isnardi discloses a method as outlined above in the claim 2 rejection. In addition, the method consists of an arrangement (see Isnardi, Figure 1).
- 25. As per claim 25, Isnardi discloses a method as outlined above in the claim 1 rejection. In addition, Isnardi discloses a method of encoding supplemental data of encoded data, wherein lossless encoding is used to encode the supplemental data. See, Isnardi, col. 4:38-40.
- 26. As per claim 26, Isnardi discloses a method as outlined above in the claim 1 rejection. In addition, Isnardi discloses a method of encoding supplemental data of encoded data, wherein the supplemental data is encoded bit by bit. See Isnardi, col. 4:38-40.

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27.

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rejection. In addition, Isnardi discloses a method of encoding supplemental data of

encoded data, wherein before the embedding, partitioning of the data into frames and

As per claim 27, Isnardi discloses a method as outlined above in the claim 1

determining a set of parameters for each frame, wherein the set of parameters can be

altered to embed the supplemental data. See Isnardi, col. 2:27-31, 64-65; 3:50-54,

especially lines 50-51; 4:20-34, 38-40.

28. As per claim 28, Isnardi discloses a method as outlined above in the claim 27

rejection. In addition, Isnardi discloses a method of encoding supplemental data of

encoded data, wherein encoded data is used to derive the set of parameters. See

Isnardi, col. 4:31-34, 38-40.

29. As per claim 29, Isnardi discloses a method as outlined above in the claim 1

rejection. In addition, Isnardi discloses a method of encoding supplemental data of

encoded data, wherein the parameters is altered to a dedicated value in response to the

supplemental data to be embedded. See Isnardi, col. 4:20-34, 38-40.

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 31. Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isnardi in view of Moskowitz et al. U.S. Patent No. 5,889,868 (hereinafter Moskowitz).
- 32. As per claims 18 and 22, Isnardi discloses a method as outlined above in the claim 2 and 15 rejections. Isnardi does not disclose a playback device, specifically a disc player for audio and audio-visual media with an arrangement to extract supplemental data. Moskowitz teaches combining watermarking schemes having the arrangement to extract supplemental data from encoded data with a disc player for audio and audio-visual media (see Moskowitz, col. 1:60-67; 10:30-62, especially line 60; 17:60-18:4). It would be obvious to one of ordinary skill in the art at the time the invention was made for the arrangement defined in claim 2 to be combined in a disc player. Motivation to combine enables the arrangement to be incorporated into nongeneralized computing devices that play or record copyrighted content. See Moskowitz, col. 10, lines 58-62. The aforementioned cover the limitations of claim 18 and 22.

#### Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W Kim whose telephone number is (571) 272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jung W Kim Examiner Art Unit 2132

Jk February 3, 2005

GILBERTO BARRON JVI.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

# Notice of References Cited Application/Control No. 09/623,945 Examiner Jung W Kim Applicant(s)/Patent Under Reexamination KAMPERMAN ET AL. Page 1 of 1

#### **U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name             | Classification |
|---|---|--|-----------------|------------------|----------------|
|   | Α | US-6,037,984                                     | 03-2000         | Isnardi et al.   | 375/240.21     |
|   | В | US-5,889,868                                     | 03-1999         | Moskowitz et al. | 713/176        |
|   | С | US-  |                 |                  |                |
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#### FOREIGN PATENT DOCUMENTS

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#### **NON-PATENT DOCUMENTS**

| * |             | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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